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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,866	04/16/2001	Heinz Willebrand	69971	5585

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EXAMINER	
PHAN, HANH	
ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 07/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/835,866	WILLEBRAND
Examiner	**Art Unit**
Hanh Phan	2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Apr 16, 2001* .

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under ***Ex parte Quayle***, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-30* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent Application No. 09/482,782 (Willebrand et al) in view of Dodley et al (U.S.Patent number 5,966,229, cited by applicant).

Regarding claim 1, Willebrand discloses a method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network (see claim 1 of Willebrand);

routing the network data traffic though an alternate communication path in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level (see claims 5-10 of Willebrand).

Willebrand differs from claim 1 in that he does not specifically disclose monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links. However, Dodley discloses monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links (Figures 1 and 2, col. 2, lines 45-67, col. 3, lines 1-67). Therefore, it would have bee obvious to one of ordinary skill in the art at the time the invention was made to incorporate the monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links as taught by Dodley in the system of Willebrand in order to compensate the power of the signal when transmitted in the weather conditions.

Regarding claims 2, 7, 16, 21, and 24, the combination of Willebrand and Dodley discloses the alternate communication path comprises a communication path that is not affected by the at least one of the one or more environmental conditions (see claims 1-10 of Willebrand).

Regarding claims 3, 17, 25, 28, and 30, the combination of Willebrand and Dodley discloses the alternate communication path comprises more than one mode of communication (see claims 1-10 of Willebrand).

Regarding claims 4 and 18-20, Willebrand further discloses the alternate communication path comprises a radio frequency (RF) communication path (see claim 4 of Willebrand).

Regarding claims 5 and 6, it would have been obvious to obtain alternate communication path comprises a wire communication path or a fiber optic communication path in order to avoid the adverse consequences that the environment and atmosphere can have on the transmitted light beams.

Regarding claims 8 and 22, the combination of Willebrand and Dodley discloses rerouting the network data traffic over the one or more free space optical links in the free-space optical network in response to data indicative of at least one of the one or more environmental conditions rising above the predetermined level (see claims 1-10 of Willebrand).

Regarding claims 9 and 26, the combination of Willebrand and Dodley discloses the step of monitoring one or more environmental conditions comprises the step of: collecting the data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links (Figs. 1 and 2 of Dodley).

Regarding claim 10, the combination of Willebrand and Dodley discloses the instrument is coupled to the free-space optical network, and wherein the step of monitoring one or more

environmental conditions further comprises the step of: polling the instrument from within the free-space optical network (Figs. 1 and 2 of Dodley).

Regarding claim 11, the combination of Willebrand and Dodley discloses the step of monitoring one or more environmental conditions further comprises the step of: storing the data indicative of at least one of the one or more environmental conditions in a memory (Figs. 1 and 2 of Dodley).

Regarding claim 12, the combination of Willebrand and Dodley discloses the step of monitoring one or more environmental conditions further comprises the step of: comparing the data indicative of at least one of the one or more environmental conditions to the predetermined level (Figs. 1 and 2 of Dodley).

Regarding claim 13, the combination of Willebrand and Dodley discloses the step of monitoring one or more environmental conditions further comprises the step of: sending an alarm over the free-space optical network in response to the data indicative of at least one of the one or more environmental conditions falling below the predetermined level (see claims 1-10 of Willebrand).

Regarding claim 14, the combination of Willebrand and Dodley discloses the step of routing the network data traffic through an alternate communication path is performed in response to the alarm (see claims 1-10 of Willebrand).

Regarding claim 15, the combination of Willebrand and Dodley discloses method of managing a free-space optical network, comprising the steps of: directing network data traffic

over one or more free-space optical links in the free-space optical network; monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; attempting to adjust one or both of a transmission power and receive sensitivity of one or more of the free-space optical links in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; and routing the network data traffic through an alternate communication path in response to a failure in the step of attempting to adjust (see claims 14-15 of Willebrand and Figs. 1 and 2 of Dodley).

Regarding claim 23, the combination of Willebrand and Dodley discloses a system for managing a free-space optical network, comprising: means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the freespace optical network; means for routing network data traffic over an alternate communication path in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; and means for rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to data indicative of at least one of the one or more environmental conditions rising above the predetermined level (see claims 1-10 of Willebrand and Figs. 1 and 2 of Dodley).

Regarding claims 27 and 29, the combination of Willebrand and Dodley discloses a method of managing a free-space optical network, comprising the steps of: directing network data traffic over one or more free-space optical links in the free-space optical network; monitoring one or more environunental conditions in a vicinity of at least one of the one or more free-space

optical links; sending an alarm over the free-space optical network in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; routing the network data traffic though an alternate communication path in response to the alarm; and rerouting the network data traffic over the one or more free space optical links in the free-space optical network in response to data indicative of at least one of the one or more environmental conditions rising above the predetermined level (see claims 1-10 of Willebrand and Figs. 1 and 2 of Dodley).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6-12, 15-18, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodley et al (U.S.Patent number 5,966,229, cited by applicant) in view of Zavrel (U.S.Patent number 5,585,953).

Regarding claim 1, Dodley discloses a method of managing a free-space optical network, comprising the steps of: directing network data traffic over one or more free-space optical links in the free-space optical network (Figs. 1 and 2); monitoring one or more environmental conditions

in a vicinity of at least one of the one or more free-space optical links (Figures 1 and 2, col. 2, lines 45-67, col. 3, lines 1-67).

Dodley differs from claim 1 in that he does not disclose routing the network data traffic though an alternate communication path in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level. However, Zavrel discloses routing the network data traffic though an alternate communication path (Fig. 1, col. 1, lines 50-67, col. 2, lines 1-11). Therefore, it would have bee obvious to one of ordinary skill in the art at the time the invention was made to incorporate the routing the network data traffic though an alternate communication path as taught by Zavrel in the system of Dodley in order to avoid the adverse consequences that the environment and atmosphere can have on the transmitted light beams.

Regarding claims 2, 16, and 24, the combination of Dodley and Zavrel discloses the alternate communication path comprises a communication path that is not affected by the at least one of the one or more environmental conditions (Fig. 1 of Zavrel, col. 1, lines 50-67, col. 2, lines 1-11)).

Regarding claims 3, 17, and 25, the combination of Dodley and Zavrel discloses the alternate communication path comprises more than one mode of communication (Fig. 1 of Zavrel).

Regarding claims 4, and 18, the combination of Dodley and Zavrel discloses the alternate communication path comprises a radio frequency (RF) communication path (Fig. 1 of Zavrel).

Regarding claims 6-8 and 20-22, it would have been obvious to obtain alternate communication path comprises a wire communication path or a free-space optical link in order to avoid the adverse consequences that the environment and atmosphere can have on the transmitted light beams.

Regarding claims 9 and 26, Dodley further discloses the step of monitoring one or more environmental conditions comprises the step of: collecting the data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links (Figs. 1 and 2 of Dodley, col. 4, lines 50-67, and from col. 5, line 1 to col. 6, line 67).

Regarding claim 10, Dodley further discloses the instrument is coupled to the free-space optical network, and wherein the step of monitoring one or more environmental conditions further comprises the step of: polling the instrument from within the free-space optical network (Figs. 1 and 2 of Dodley).

Regarding claim 11, Dodley further discloses the step of monitoring one or more environmental conditions further comprises the step of: storing the data indicative of at least one of the one or more environmental conditions in a memory (Figs. 1 and 2 of Dodley, col. 4, lines 50-67).

Regarding claim 12, Dodley further discloses the step of monitoring one or more environmental conditions further comprises the step of: comparing the data indicative of at least

one of the one or more environmental conditions to the predetermined level (Figs. 1 and 2 of Dodley, col. 4, lines 50-67, and from col. 5, line 1 to col. 6, line 67).

Regarding claim 15, the combination of Dodley and Zavrel discloses method of managing a free-space optical network, comprising the steps of: directing network data traffic over one or more free-space optical links in the free-space optical network; monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; attempting to adjust one or both of a transmission power and receive sensitivity of one or more of the free-space optical links in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; and routing the network data traffic through an alternate communication path in response to a failure in the step of attempting to adjust (Figs. 1 and 2 of Dodley and Fig. 1of Zavrel).

Regarding claim 23, the combination of Dodley and Zavrel discloses a system for managing a free-space optical network, comprising: means for monitoring one or more environmental conditions in a vicinity of at least one of one or more free-space optical links in the freespace optical network; means for routing network data traffic over an alternate communication path in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; and means for rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to data indicative of at least one of the one or more environmental conditions rising above the predetermined level (Figs. 1 and 2 of Dodley and Fig. 1 of Zavrel).

5. Claims 5, 13, 14, 19, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodley et al (U.S.Patent number 5,966,229, cited by applicant) in view of Zavrel (U.S.Patent number 5,585,953) and further in view of Bae (U.S. Patent number 5,790,286).

Regarding claims 5 and 19, the combination of Dodley and Zavrel differs from claims 5 and 19 in that it does not specifically teach the alternate communication path comprises a fiber optic communication path. However, Bae discloses an alternate communication path comprises a fiber optic communication path (Fig. 3, col. 3, lines 56-67, col. 4, lines 1-47). Therefore, it would have bee obvious to one of ordinary skill in the art at the time the invention was made to incorporate the an alternate communication path comprises a fiber optic communication path as taught by Bae in the system of the combination of Dodley and Zavrel in order to avoid the adverse consequences that the environment and atmosphere can have on the transmitted light beams.

Regarding claim 13, the combination of Dodley, Zavrel, and Bae discloses the step of monitoring one or more environmental conditions further comprises the step of: sending an alarm over the free-space optical network in response to the data indicative of at least one of the one or more environmental conditions falling below the predetermined level (Fig. 3 of Bae, col. 3, lines 56-67, col. 4, lines 1-47).

Regarding claim 14, the combination of Dodley, Zavrel, and Bae discloses the step of routing the network data traffic through an alternate communication path is performed in response to the alarm (Fig. 3 of Bae).

Regarding claims 27 and 29, the combination of Dodley, Zavrel, and Bae discloses a method of managing a free-space optical network, comprising the steps of: directing network data traffic over one or more free-space optical links in the free-space optical network; monitoring one or more enviroruneutal conditions in a vicinity of at least one of the one or more free-space optical links; sending an alarm over the free-space optical network in response to data indicative of at least one of the one or more environmental conditions falling below a predetermined level; routing the network data traffic though an alternate communication path in response to the alarm; and rerouting the network data traffic over the one or more free space optical links in the free-space optical network in response to data indicative of at least one of the one or more environmental conditions rising above the predetermined level (Figs. 1 and 2 of Dodley and Fig. 3 of of Zavrel, and Fig. 1 of Zavrel).

Regarding claims 28 and 30, the combination of Dodley, Zavrel, and Bae discloses the alternate communication path comprises more than one mode of communication (Fig. 1 of Zavrel).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosutre.

Kirkpatrick et al (U.S.Patent number 6,288,813) teaches apparatus and method for effecting data transfer between data systems.

Korevaar et al (U.S.Patent number 6,141,128) teaches laser communication link.

Bozzay et al (U.S.Patent number 6,043,918) teaches laser communication systems.

Bjorndahl (U.S.patent number 6,396,612) teaches system for seciure transmission of confidential information.

Takada (U.S.Patent number 5,949,563) teaches redundant system switching method.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Leslie Pascal

LESLIE PASCAL
PRIMARY EXAMINER